

ABSTRACT

The present invention includes an inflow quantity regulating means 5 for regulating the inflow quantity of a fuel gas to a compressor 1; a recycle valve 7 for returning the fuel gas discharged from the compressor 1 to the inlet side of the compressor 1; and a control means which sets a control operating value for operating the compressor 1 at a predetermined operation point, and controls the inflow quantity regulating means 5 and the recycle valve 7 based on the control operating value. The control means has a first control signal generating means 27 which generates a signal increasing with an increase in the operating value as a control signal for the inflow quantity regulating means 5 when the control operating value is a predetermined value or larger and a second control signal generating means 29 which generates a signal decreasing with an increase in the operating value as a control signal for the recycle valve 7 when the control operating value is smaller than the predetermined value. According to the present invention, high controllability can be obtained under all operating conditions including load shutdown.